

SHORELINE EROSION CONTROL Water Quality Impact Assessment

Pursuant to §23.2-9(d)(3) York County Chesapeake Bay Preservation Areas Ordinance

York River Living
Shoreline Protection

Date: 4.15.2010

CB: 20010-10; VMRC10-0379

1. Applicant/Agent: AFETA Camp Peary; Jennifer Davis
Phone Number: 757.229.2121 ext. 4263
2. Property Owner (if different from applicant): _____
Property Address: 1100 Executive Dr; Williamsburg, VA 23188
3. VMRC Number: #10-0379
4. Parcel Identification (GPIN) GPS Coord: 37°19'51" / 76°38'46"
5. Does County sanitary sewer or an on-site wastewater disposal system serve this lot/parcel? not applicable
6. Description of the Proposed Project:
Installation of 4-150 long "living shoreline" rip rap breakwaters to protect 870 feet of York River Shoreline.

Please check all that apply or supply quantities for the following:

7. Project Description:

<input type="checkbox"/> a. Riprap Revetment	<input type="checkbox"/> b. Tree Removal	<input type="checkbox"/> c. Re-Grading
<input checked="" type="checkbox"/> d. Bulkhead	<input type="checkbox"/> e. Fill	
8. Will the project require any of the following?

<input checked="" type="checkbox"/> a. Excavation	<input checked="" type="checkbox"/> b. Filling	<input checked="" type="checkbox"/> c. Grading
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9. Existing Site Conditions:

<input type="checkbox"/> a. Heavily Wooded	<input checked="" type="checkbox"/> h. Understory/brush
<input checked="" type="checkbox"/> b. Sparsely Wooded	<input type="checkbox"/> i. Leaves/needles
<input type="checkbox"/> c. No Trees	<input type="checkbox"/> j. Bare Soil
<input type="checkbox"/> d. Marsh/Swamp	<input checked="" type="checkbox"/> k. Eroding soils/shoreline
<input type="checkbox"/> e. Stream	<input checked="" type="checkbox"/> l. Waterfront Property
<input type="checkbox"/> f. Ravine or Ditch	<input type="checkbox"/> m. Paved
<input type="checkbox"/> g. Grass/Lawn	<input type="checkbox"/> n. Other: _____
10. Impacts on Existing Vegetation in RPA:

<input type="checkbox"/> a. Number of trees greater than 3" in diameter removed within 50-feet of shoreline	
<input checked="" type="checkbox"/> b. Number of trees greater than 6" in diameter removed for construction access	
<input type="checkbox"/> c. Approximate square footage of understory/brush/leaves/needles removed	
<input type="checkbox"/> d. Number of trees to be heavily pruned	
<input type="checkbox"/> e. Number of dead or diseased trees removed	
<input type="checkbox"/> f. Other: _____	

-not trees to be
removed for
construction access

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11. Proposed Methods to Minimize Site Impacts:

- ☐ a. Tree protection/barriers
- ☒ b. Single construction/access way
- ☒ c. Stockpile construction materials and debris on hard surfaces
- ☒ d. Barriers to define limits of construction activity/land disturbance
- ☒ e. Any other methods? Please describe: minimum footprint required
+ utilizing a living shoreline approach.

12. Proposed Mitigation Measures:

- ☒ a. Vegetation replacement:

- ☐ Trees
- ☐ Mulch of pine needles/bark
- ☐ Shrubs
- ☐ b. Number of new trees proposed
- ☐ c. Number of new shrubs proposed
- ☐ d. Number of new ground cover plants proposed
- ☒ e. Erosion and sediment control structures utilized:
 - ☐ Temporary Seeding
 - ☒ Silt fence
 - ☒ Construction entrance
 - ☒ Construction Barrier/Fencing
 - ☐ Other: _____

note: new breakwater
and beach fill areas will
be planted with
smooth cordgrass and
salt meadow hay
plantings.

13. Please describe the nature and extent of the erosion problem on the site:

The existing York River shoreline is experiencing
severe bank erosion due to storm surge and
wave action.

14. Please provide the justification (need) for the project:

Placement of the new breakwater structures will
provide protection from erosion causing forces and
provide for a stable York River bank in this location.

15. Please provide the basis for selecting the proposed erosion control method:

The living shoreline approach will not only prevent
shoreline erosion but will provide benefits to
water quality + wildlife.

16. Are you seeking or have you already obtained permits from other local, state or federal agencies in conjunction with this project? ☒ Yes ☐ No If yes, please describe:

Vmec - no permit required (3.19.2010)

USACE - no response received to date

VDEQ - no permit required (4.8.2010)

York River Living Shoreline Protection

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Additional plan will be provided post York County Staffer visit so that all comments are incorporated.

ATTACH plan with the following information:

- Current survey with dimensions of lot and location of any existing buildings, driveways, decks, sidewalks, etc.
- Location and method of construction access
- Two benchmark distances to each endpoint of the project and at 50-foot intervals
- Location of on-site sewage disposal system (if applicable)
- Location of shoreline, wetlands, stream and Resource Protection Area boundary
- Location and dimensions of proposed project
- Area of land disturbance, clearing, grading and fill
- Erosion and Sediment Control measures
- Location and dimensions of BMP and supporting calculations
- Location of permanent signs and temporary construction fencing
- Location, type and size of existing trees and vegetation in RPA
- Designation of trees to remain and trees to be removed in RPA
- Buffer restoration and replacement planting location and detail

Project has been staked in the field for York County staffer verification.

Office Use Only

Recommendations:

Impact on RPA buffer:

CBPA Program Manager:

- ☐ Approved as requested.
- ☐ Approved with the following conditions:
- ☐ Denied.

Date: _____

Signature: _____

CBPA Program Manager

Powell Lake
Rip Rap Structure.

SHORELINE EROSION CONTROL
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2. Property Owner (if different from applicant): _____
Property Address: 1100 Executive Dr.; Williamsburg, VA 23188
3. VMRC Number: # 10-0379
4. Parcel Identification (GPIN) GPS Coordinates 37°19'57" ; 76°38'46"
5. Does County sanitary sewer or an on-site wastewater disposal system serve this lot/parcel? not applicable
6. Description of the Proposed Project:
Establishing a rip rap structure at Powell Lake shore-
line due to storm surge + wave action erosion.
(320 linear ft + composed of Class II rip rap underlain
with woven filter cloth.
Please check all that apply or supply quantities for the following:
7. Project Description:
☒ a. Riprap Revetment ☐ b. Tree Removal ☐ c. Re-Grading
☐ d. Bulkhead ☐ e. Fill
8. Will the project require any of the following?
☒ a. Excavation ☒ b. Filling ☒ c. Grading
9. Existing Site Conditions:
☐ a. Heavily Wooded ☐ h. Understory/brush
☐ b. Sparsely Wooded ☐ i. Leaves/needles
☒ c. No Trees ☐ j. Bare Soil
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☐ f. Ravine or Ditch ☐ m. Paved
☐ g. Grass/Lawn ☐ n. Other: _____
10. Impacts on Existing Vegetation in RPA:
☐ a. Number of trees greater than 3" in diameter removed within 50-feet of shoreline
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☐ c. Approximate square footage of understory/brush/leaves/needles removed
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11. Proposed Methods to Minimize Site Impacts:

- ☐ a. Tree protection/barriers
- ☐ b. Single construction/access way
- ☒ c. Stockpile construction materials and debris on hard surfaces
- ☒ d. Barriers to define limits of construction activity/land disturbance
- ☒ e. Any other methods? Please describe: utilized minimum footprint required to install new rip rap; access is available from adjacent paved roadway.

12. Proposed Mitigation Measures:

- ☒ a. Vegetation replacement:
 - ☐ Trees
 - ☐ Mulch of pine needles/bark
 - ☐ Shrubs
 - ☐ b. Number of new trees proposed
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 - ☐ Temporary Seeding
 - ☒ Silt fence
 - ☐ Construction entrance
 - ☐ Construction Barrier/Fencing
 - ☐ Other: _____
- note: temporary impacts to vegetated wetlands will be re-vegetated once construction is complete.

13. Please describe the nature and extent of the erosion problem on the site:

The existing dam at Powell Lake has experienced erosion due to storm surge and wave action.

14. Please provide the justification (need) for the project:

Placement of new riprap structure will provide protection from erosion on the existing dam and roadway.

15. Please provide the basis for selecting the proposed erosion control method:

Existing dam structure with riprap adjacent to existing roadway - placement of new riprap is least environmentally damaging alternative.

16. Are you seeking or have you already obtained permits from other local, state or federal agencies in conjunction with this project? ☒ Yes ☐ No If yes, please describe:

VMCC - no permit required (3.19.2010)
USACOE - no response received to date
VDEO - no permit required (4.8.2010)

Powell Lake Structure.

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- ☐ Approved with the following conditions:

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Signature: _____

CBPA Program Manager